

### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

#### **Listing of Claims:**

1. (Currently Amended) A method in a computer system for predicting a level of consumption of healthcare resources by modeling utilization of healthcare resources in a target period, the method comprising:
  - compiling a plurality of provider claims for each of a plurality of members of a health plan, wherein the provider claims for the plurality of members occur within a base period and include a plurality of health conditions or diseases;
  - storing a plurality of disease categories representing a plurality of health conditions or diseases;
  - storing category weight data, wherein the category weight data comprises a weight value associated with each stored disease category, wherein each weight value associated with a stored disease category represents an average incremental cost for a plan member associated with the presence of the associated stored disease category during the base period;
  - for each of the plurality of health plan members, identifying each stored disease category present in the plurality of provider claims for the member;
  - calculating a burden of illness score for each member, wherein the burden of illness score is a number calculated by summing the stored weight values associated with each disease category identified in the member's provider claims;
  - storing at least one explanatory value, wherein the explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member;
  - computing a utilization score for each health plan member as a function of the burden of illness score and the at least one explanatory variable, wherein the explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member the utilization score is computed by assigning a weight factor to the burden of illness score and to the explanatory variable and summing (a) the product of the burden of illness score and its assigned weight

factor and (b) the product of the explanatory variable and its assigned weight factor; and

using the utilization score to predict healthcare resource consumption in the target period by at least one plan member.

2-3. Canceled.

4. (Previously presented) The method of claim 1 wherein the disease categories are CCG categories.

5. Canceled.

6. (Previously presented) The method of claim 1 further including the step of cleaning the provider claims to remove obviously erroneous information by comparing categories of the provider claims to acceptable values.

7-15. Canceled.

16. (Previously presented) The method of claim 1 further including, prior to the calculating step, determining the presence of a plurality of medical episodes in the plurality of provider claims and grouping the plurality of provider claims into one or more groups based on a medical episode.

17. (Previously presented) The method of claim 16 wherein the groups are Clinical Care Groups.

18-20. Canceled.

21. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the presence of a comorbidity in the member's plurality of provider claims.

22. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the presence of a complication in the member's plurality of provider claims.

23. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the age of the member.

24. (Previously presented) The method of claim 1 wherein the burden of illness score is adjusted to reflect the gender of the member.

25-26. Canceled.

27. (Original) The method of claim 1 wherein the at least one explanatory variable is a number indicating in which of a plurality of age categories the member belongs.

28. (Original) The method of claim 1 wherein the at least one explanatory variable is a number indicating the gender of the member.

29. (Previously presented) The method of claim 1, wherein the explanatory variable is a factor that indicates a number of claims representing a chronic disease for the member.

30. Canceled.

31. (Original) The method of claim 1 wherein the explanatory variable is a factor that indicates the recency of claims for the member.

32. (Previously presented) The method of claim 1 wherein the explanatory variable is the sum of chronic medical costs from the medical claims.

33. (Previously presented) The method of claim 1 further including calculating a relative risk for the member of a group by dividing the utilization score by an average utilization score for the group.

34. (Previously presented) The method of claim 1 further including calculating a relative risk for the member of a group by dividing the utilization score by an average utilization score for a benchmark group.

36. Canceled.

37. (Previously presented) The method of claim 1, further comprising the step of identifying a high risk set of members by selecting the members having utilization scores that exceed a predetermined level.

38. Canceled.

39. (Previously presented) The method of claim 1, further comprising calibrating the model by comparing a computed utilization score against healthcare resource utilization for the target period.

40-42. Canceled.

43. (Previously presented) The method of claim 1, further comprising, prior to the computing step, calibrating the model of a computed utilization score against healthcare resource utilization for a known target period, for only utilization due to chronic medical conditions.

44-48. Canceled.

49. (Currently Amended) A method in a computer system for determining consumption of healthcare resources by a plurality of plan members in a healthcare plan during a base time period, comprising:

compiling pharmacy claims for each of a plurality members of a health plan, wherein the pharmacy claims for the plurality of members include a plurality of drug categories;

storing a plurality of drug categories;

storing category weight data, wherein the category weight data comprises a weight value associated with each stored drug category, wherein each weight value associated with a stored drug category represents an average incremental cost for a plan member associated with the presence of the associated stored drug category during the base period;

for each of the plurality of health plan members, identifying each stored drug category present in the plurality of pharmacy claims for the member;

calculating a burden of illness score for each member, wherein the burden of illness score is a number calculated by summing the stored weight values associated with each drug category identified in the member's pharmacy claims;

storing at least one explanatory value, wherein the explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member;

computing a utilization score for each health plan member as a function of the burden of illness score and the at least one explanatory variable, wherein the at least one explanatory variable is derived from demographic data or prior healthcare utilization data associated with the member, and wherein the utilization score is computed by assigning a weight factor to the burden of illness score and to the explanatory variable and summing (a) the product of the burden of illness score and its assigned weight factor and (b) the product of the explanatory variable and its assigned weight factor a weighted sum of the at least one explanatory variable and the burden of illness score; and

using the utilization score to predict healthcare resource consumption by at least one plan member.

50-51. Canceled.

52. (Previously presented) The method of claim 49, wherein the target period is later in time than the base period.

53. (Previously presented) The method of claim 49, wherein the target period is the same time period as the base period.

54-56. Canceled.

57. (Previously amended) The method of claim 49, further including the step of cleaning the claim data to remove obviously erroneous information by comparing categories of the data set to acceptable values.

58. (Previously presented) The method of claim 49, wherein the drug categories correspond to GC3 pharmacy classes.

59-62. Canceled.

63. (Previously presented) The method of claim 49, wherein pharmacy claims in the claim data are assigned to one of a plurality of groups based on a relationship to corresponding medical claims indicating the presence of the medical episode.

64-65. Canceled.

66. (Previously presented) The method of claim 49, wherein the associated burden weight for at least one health condition is adjusted based on the age of each member.

67. (Previously presented) The method of claim 49, wherein the associated burden weight for at least one health condition is adjusted based on the gender of the member.

68. (Previously presented) The method of claim 49, wherein the associated burden weight for at least one health condition is adjusted based on an average incremental cost associated with a benchmark population.